

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property Organization
International Bureau**



**(43) International Publication Date
10 February 2005 (10.02.2005)**

PCT

(10) International Publication Number
WO 2005/012025 A1

(51) International Patent Classification⁷: B60K 28/16, (74) Agent: ITEC INTERNATIONAL PATENT FIRM;
41/20 Pola-Nagoya Bldg. 9-26, Sakae 2-chome, Naka-ku,

(21) International Application Number: PCT/JP2004/011004

(22) International Filing Date: 26 July 2004 (26.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2003-203736 30 July 2003 (30.07.2003) JP

(71) Applicant (*for all designated States except US*): TOYOTA JIDOSHA KABUSHIKI KAISHA [JP/JP]; 1, Toyota-cho, Toyota-shi, Aichi, 4718571 (JP).

(72) Inventor; and

(75) **Inventor/Applicant** (for US only): HOMMI, Akira [JP/JP]; c/o TOYOTA JIDOSHA KABUSHIKI KAISHA, 1, Toyota-cho, Toyota-shi, Aichi, 4718571 (JP).

(74) Agent: ITEC INTERNATIONAL PATENT FIRM;
Pola-Nagoya Bldg. 9-26, Sakae 2-chome, Naka-ku,
Nagoya-shi, Aichi. 4600008 (JP).

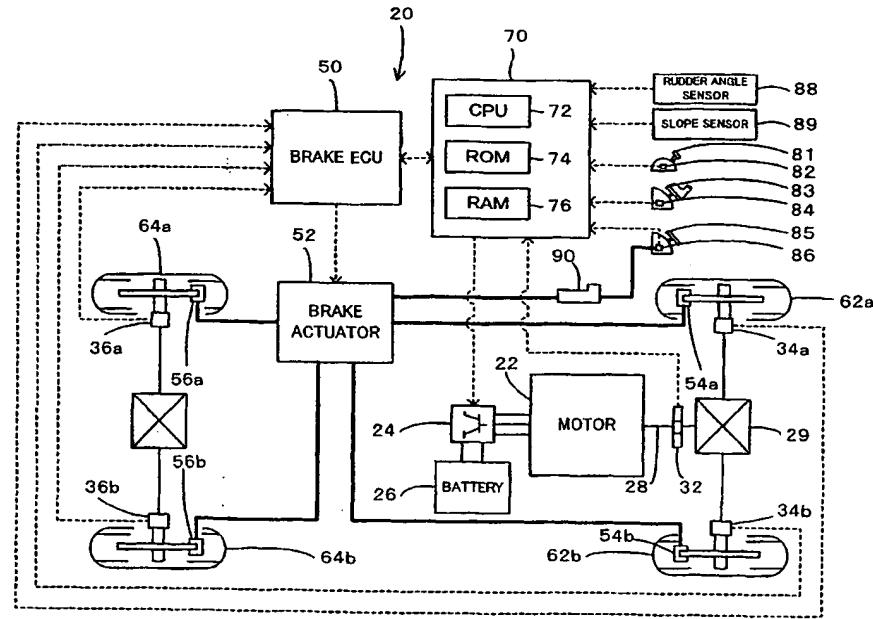
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: VEHICLE CONTROL METHOD



(57) Abstract: In response to detection of a slip occurring on left and right front wheels (62a, 62b) caused by spin of one of the left and right front wheels (62a, 62b), the control technique of the invention restricts a torque output from a motor (22) to a drive shaft (28), while activating a hydraulic brake (54a) or (54b) corresponding to the spinning wheel to output a brake torque, so as to distribute the output torque of the motor (22) practically equally into the left and right front wheels (62a, 62b). This arrangement desirably improves the starting performance and the accelerating performance of a vehicle with the left and right front wheels (62a, 62b) running on the road surface of different frictional coefficients.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.